

REMARKS

Claims 1-34 are now pending in the application. Claims 3-5, 10, 15, and 19-34 are withdrawn from consideration as being drawn to non-elected species. With this amendment, Claims 19 and 26 are amended. Upon entry of the amendment, Claims 1-34 remain pending.

Support for the amendments to Claims 19 and 26 are found in the specification as originally filed. In particular, Claims 19 and 26 have been amended to depend from generic Claim 1. No new matter is added. Applicant respectfully requests entry of the amendment.

TIME PERIOD FOR REPLY

Because no shortened statutory period for reply was indicated on the Office Action Summary, the time period for reply would appear to be the sixth-month statutory period provided by 35 U.S.C. § 133, which expires on January 13, 2008. Since it is the usual practice of the Office to provide for a three-month shortened statutory period for response to a Notices of Rejection under 35 U.S.C. § 132(a), Applicant assumes the shortened period applies here. Accordingly, since reply is timely on or before October 13, 2007, no extension fee is due at this time. As noted, the Office is authorized to withdraw any fee necessary to keep the application pending from Harness, Dickey, & Pierce deposit account 08-0750.

RESTRICTION REQUIREMENT

As noted correctly by the Examiner on page 3 of the Office Action, Claims 3-5, 10, 15, and 19-34 are withdrawn from consideration as being drawn to non-elected species. Applicant apologizes for failing to indicate the elected claims as required in the paper of February 21, 2007, and thanks the Examiner for his consideration in helping to advance prosecution.

REJOINDER OF NON-ELECTED SPECIES; AMENDMENTS TO CLAIMS 19 AND 26

Elected Claims are 1, 2, 6-9, 11-14, and 16-18. According to MPEP 821.04, the restriction requirement should be reconsidered when all claims directed to the elected invention are in condition for allowance. At that time, the non-elected inventions should be considered for rejoinder. The MPEP further states that in order to be eligible for rejoinder, claims to a non-elected invention must depend from or otherwise require all the limitations of an allowable claim. It further states that in order to retain the right to rejoinder the claims to the non-elected

invention should be amended during prosecution to require the limitations of the elected invention.

In light of the above, Applicant has amended non-elected (and withdrawn) Claims 19 and 26 to depend from elected Claim 1. Claims 19 and 26 are properly dependent because they incorporate all of the limitations of Claim 1 and further limit the claimed invention. In Claim 19, the polymerization is further limited to ring opening or condensation polymerization; in Claim 26, the reactive oligomer is further limited to a macrocyclic polyester oligomer. By this amendment, claims to the non-elected inventions require the limitations of the elected invention, as required by MPEP 821.04. Because the amended claims are eligible for rejoinder if claims directed to the elected invention are in condition for allowance, Applicant has not cancelled any claims, instead listing them as withdrawn and, where applicable, amended.

DOUBLE PATENTING REJECTION

Claims 1, 2, 6-9, 11-14, and 16-18 are provisionally rejected for obviousness type double patenting in view of Claims 31-52 and 71-79 of co-pending Application 10/620,213. Applicant respectfully traverses the rejection and requests reconsideration

Contrary to the assertion in the Office Action, the current claims and the claims of the '213 application are patentably distinct because they are drawn to significantly different inventions. For convenience and illustration, Claim 31 of the '213 application is reproduced here:

“31. A method for making a rubber composition comprising: forming a mixture by combining a curative, an uncured or partially cured elastomeric material, and a thermoplastic material; and heating the mixture at a temperature and for a time sufficient to effect vulcanization of the elastomeric material, wherein mechanical energy is applied to mix the mixture during the heating step; wherein the elastomeric material comprises a fluorocarbon elastomer; and wherein the thermoplastic material comprises a non-fluorine-containing polymeric material.”

The Office Action correctly characterizes the '213 application when it says the document “shows the required method of forming a mixture” by combining an uncured or partially cured elastomeric material, a curing agent, and a thermoplastic material with subsequent application of heat in mechanical energy.

In contrast to the above Claim 31, current Claim 1 recites making a mixture by combining elastomeric material, curing agent, and a reactive oligomer. The reactive oligomer of the claims is not the same as or obvious in light of the thermoplastic material recited in the '213 application. The current claims differ in a significant way by providing a reactive oligomer that polymerizes during the mixing to form a thermoplastic polymer. The '213 application, on the other hand, claims a process that involves mixing the uncured elastomeric material with an already formed thermoplastic material. In '213, there is no simultaneous cure of the elastomeric material and polymerization of the reactive oligomer. For these reasons, Applicant respectfully requests that the double patenting rejection be withdrawn.

REJECTION UNDER 35 U.S.C. § 102

Claims 1, 2, 6-9, 11, 12 and 16-18 stand rejected under 35 U.S.C. § 102(b) as being anticipated by the Goebel reference (EP 0 432 911 A1). The Office Action cites to page 7 and page 8 of the reference for the use of polyester resins, including the polybutylene terephthalate of the claims. The Office Action further states that the process is taught essentially at page 9. Applicant respectfully traverses the rejection and requests reconsideration.

As stated in the Office Action, the Goebel reference discloses the use of polyester resins including "the polybutylene terephthalate of the claims". But the polybutylene terephthalate of the claims is the product of the dynamic vulcanization, not a starting material as in the reference. As discussed above with respect to the double patenting rejection, the reference teaching of polyester resins such as polybutylene terephthalate does not anticipate or suggest the reactive oligomer recited in the rejected claims. The reactive oligomer of the current claims is "a compound that polymerizes to form a thermoplastic polymer matrix". Seen in this light, it is clear that the polyester resins of the Goebel reference are not the same as, nor do they suggest the use of, the reactive oligomer of the claims. For these reasons, Applicant respectfully requests that the rejection be withdrawn.

Claims 1, 2, 6, 8, 9, 11-14, and 16-18 are rejected under 35 U.S.C. § 102(b) as anticipated by the Takeyama reference (U.S. Pat. No. 6,079,465). The Office Action states that the reference shows production of a rubber composition that may comprise fluororubbers with a thermoplastic that may be a polyester, including polybutylene terephthalate. Applicant respectfully traverses the rejection and requests reconsideration.

For similar reasons as discussed above with respect to the double patenting rejection and the other anticipation rejection, Applicant notes that the thermoplastic polyester or polybutylene terephthalate disclosed in the reference and cited in the Office Action is not the same as the reactive oligomer of the claims. The reference teaches dynamic vulcanization of a fluororubber in the presence of a thermoplastic material. The claims, on the other hand, are drawn to methods of dynamic vulcanization that involve simultaneous polymerization of a reactive oligomer and vulcanization of the elastic material. The reference does not disclose or suggest the claimed subject matter. For these reasons, Applicant respectfully requests the rejection be withdrawn.

REJOINDER OF NON-ELECTED CLAIMS

Applicant respectfully requests reconsideration of the propriety of the Restriction Requirement in view of Applicant's amendment to Claims 19 and 26. In light of those amendments and the arguments above, Claim 1 is allowable and generic to the non-elected species claims. Applicant respectfully submits rejoinder is proper according to MPEP 821.04. Accordingly, he requests rejoinder of the non-elected claims, as amended.

CONCLUSION

For the reasons discussed above, Applicant believes that elected Claims 1, 2, 6-9, 11-14, and 16-18 are in an allowable condition and that rejoinder of withdrawn Claims 3-5, 10, 15, and 19-34 is proper. Applicant respectfully requests an early Notice of Allowance of Claims 1-34.

The Examiner is invited to telephone the undersigned if that be helpful to resolving any issues.

Respectfully submitted,

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